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BRIEF COMMUNICATION

FIRST RECORD OF THE SOUTHERN RIGHT WHALE DOLPHIN, *LISSODELPHIS PERONII* (LACÉPÈDE, 1804) (ODONOCETI : DELPHINIDAE), FROM WATERS OFF SOUTH AUSTRALIA

The southern right whale dolphin *Lissodelphis peronii* is a small pelagic dolphin that is rarely observed close to land. What little is known about its biology has been gathered from stranded specimens[1]. The species occurs only in Southern Hemisphere waters where it appears to be largely restricted to the region bounded by the Antarctic Front in the south and the Subtropical Front in the north[1]. It is unusual amongst dolphins occurring in the Australasian region in that it lacks a dorsal fin[2]. *Lissodelphis peronii* appears actively to avoid ships and this and its unobtrusive behaviour when not alarmed may result in the species being under-recorded.

Whilst conducting surveys of seabirds from the bridge of the CSIRO research vessel 'Franklin' during a voyage that included five days cruising in Australian territorial waters off South Australia, groups of whales and dolphins were sighted on several occasions. On 11 August 1998 when the ship was 92 nautical miles south of Cape Gantheaume, Kangaroo Island, South Australia (37° 32' 10" S, 137° 27' 40" E) and proceeding in a north-easterly direction a herd of small dolphins was observed surfacing 200 m from the ship. On the basis of an absence of any dorsal fin and the striking combination of white ventral surfaces and a largely black dorsum the dolphins were identified as *L. peronii*.

At the time of the sighting (11.05 – 11.07 a. m. Aust. CST) viewing conditions were good. With a southerly wind of less than five knots, the sea surface was glassy smooth, with only a slight swell (~2 m). Air temperature was 14.0 °C, barometric pressure was 1020.3 hp and steady and the conditions were cloudy but bright. Water temperature at the sea surface was 12.87 °C and salinity 34.98 ppm. The dolphins were observed 44 nautical miles south of the continental shelf in deep (4904 m) pelagic waters, just south of the Subtropical Front. Slightly warmer water (13.5-14.5 °C) was encountered later in the same day only several nautical miles to the north of this sighting. At first my attention was drawn to an area of small splashes on the surface of an otherwise calm sea. By the use of 10 X 50 binoculars small dark backed dolphins were identified as the cause of this disturbance. The dolphins were travelling slowly (2-5 knots) away from the vessel. When rising to blow they broke the surface gently, exposing only the very top of their dorsal surfaces but the complete absence of a dorsal fin was immediately obvious. The dolphins were travelling as a compact group all heading in the same direction and it was difficult to assess their number. This behaviour continued for approximately 30 sec before the dolphins abruptly changed direction placing them on a course heading across the bow of the ship. At the same time they began porpoising clear of the surface. After travelling less than 50 m the herd abruptly changed direction again returning to their initial course heading away from the vessel. The dolphins were now more easily counted and I estimated the herd comprised 20 individuals. No young were seen. They continued to move away from the ship on a fairly direct course and when last seen, approximately two min later, were still travelling at a sustained speed and porpoising clear of the water.

As each animal leapt clear of the water, good views of it were obtained. The following composite description was made from field notes taken at the time of the sighting. The dolphins were small and slender and were about two metres in length. When porpoising their bodies appeared disproportionately elongated, although this feature was presumably enhanced by the absence of dorsal fins. Each individual had a striking but simple pied pattern that

TABLE 1. *Sightings and strandings of* Lissodelphis peronii *in the Australian region.*

Date	Location	Position	Comments	Source
11 Jan. 1802	Off southern Tasmania	c. 44° S, 141° E	type specimen	Peron (1807) in 1
7 Jan. 1824	Off SE Australia	c. 45°S	harpooned	6
Pre 1884	Tasmania	?	specimen	7
Aug. 1968	c. 100 miles SW of Australia	?	sighting of six individuals	4
Oct. 1978	Cloudy Bay, Bruny Island, Tas.	43° 25'S, 147° 15' E	Stranding (Tas. Mus. specimen # A13011)	1
Aug. 1970	mid Great Aust. Bight (WA or SA)	?	sighting of 50 individuals	4
13 Sept. 1985	Off South-west Cape, Tas.	41° 41' S, 145° 40'E	sighting of 25 individuals	D. W. Eades pers. comm. 1999
14 Feb. 1986	South of WA	46° 03'S, 126° 52' E	sighting of c. 500 individuals	8
Sept. 1986	Bendalong, NSW	35° 15'S, 150° 32' E	apparent stranding (see text)	5
29 Sept. 1995	Chinamans Bay, Maria Island, Tas.	42° 40' S, 148° 03' E	stranding	R. M. Warneke pers. comm. 1999
11 Aug. 1998	92 miles off Cape Gantheaume, Kangaroo Island SA	37° 32' S, 137° 27' E	sighting of 20 individuals	this study

appeared consistent across the herd. White ventral surfaces extended dorsally to the rostrum and face. The upper surface of the flippers, and the remaining dorsal surfaces were black. The border where black and white met was sharply defined, and curved from the middle of melon down the sides of the head to a point at, or just above, the flipper; it then curved upwards slightly before continuing along the flanks and tail stock as a fairly straight line.

To the best of my knowledge this sighting is the first documented occurrence of *L. peronii* in waters off South Australia and the 11th for waters around Australia (Table 1). Previous records have included 4 strandings and/or specimens and 6 sightings, with most being from waters south of Tasmanian. There are no records from Victoria and just one or two from waters off Western Australia. However, one of these sightings may have occurred in waters off South Australia as the record was simply noted as 'in the middle of the Great Australian Bight'[4]. The most northerly record of *L. peronii* in Australian waters is of a stranded animal at Bendalong in NSW (35° S)[5]. However, this record should be treated as unconfirmed as enquiries by the author failed to locate any specimen, photographs, notes or first hand knowledge of this individual.

The complete absence of strandings along the southern coast of mainland Australia and the scarcity of records elsewhere in Australian waters may be attributable to the species' preference for pelagic waters[2]. The small size of *L. peronii* further reduces the likelihood of dead animals being washed ashore as scavengers are likely to consume such small carcasses before they are able to drift to the coast from pelagic waters. Although the species has been known to ride on the bow wave of vessels on occasions, this behaviour is apparently uncommon[3]. An apparent avoidance of vessels, as noted in the observation documented here, has been reported by other observers[3]. This avoidance behaviour, combined with the species small size, and inconspicuous nature when not alarmed, may result in individuals or small herds being overlooked. Indeed the individuals observed off South Australia are unlikely to have been sighted had sea surface conditions been more typical and white caps of any size been present. Combined with the knowledge that competent field observers have, until quite recently, had few opportunities to systematically or routinely visit deep pelagic waters of the cool temperate zone of the Australian region the status of *L. peronii* in the region remains unclear.

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